From: Sonafrank, Nancy B (DEC) <nancy.sonafrank@alaska.gov>

Sent: Tuesday, February 23, 2016 4:56 PM

Tabor, Brock N (DEC); 'lkduffy@alaska.edu'; Fall, James A (DFG); Gerlach, Robert F

(DEC); Hamade, Ali K (HSS); 'Jokela, Brett'; Kissinger, Lon; 'Alison Kelley'; 'Michael Opheim'; 'Verbrugge, Lori'; Wu, Ted H (DEC); 'Kendra Zamzow'; Hale, Michelle M (DEC);

Szelag, Matthew

Cc: Kostick, Marylynne L (DFG); 'Tracie Merrill'

Subject: RE: follow up to last Wedneday's teleconferece

The USGS Hydrological Unit Codes (HUC) may also roughly correspond to the Fish and Game Subsistence regions at the 4-digit HUC level https://water.usgs.gov/wsc/reg/19.html. The larger the HUC the smaller the watershed. Click on each region to see how the watersheds are divided up at the next 6-digit level.

From: Sonafrank, Nancy B (DEC)

Sent: Tuesday, February 23, 2016 3:34 PM

To: Tabor, Brock N (DEC); 'Ikduffy@alaska.edu'; Fall, James A (DFG); Gerlach, Robert F (DEC); Hamade, Ali K (HSS);

'Jokela, Brett'; 'Kissinger, Lon'; 'Alison Kelley'; 'Michael Opheim'; 'Verbrugge, Lori'; Wu, Ted H (DEC); 'Kendra Zamzow'; Hale, Michelle M (DEC); 'Szelag, Matthew'

Cc: Kostick, Marylynne L (DFG); 'Tracie Merrill'

Subject: RE: follow up to last Wedneday's teleconferece

If you want to check out the Ecoregion map for Alaska, it can also be found on the ADF&G website at http://www.adfg.alaska.gov/static/lands/ecosystems/images/ecoregions Ig.png. These are essentially the same as the Level 3 ecoregions in the National Hydrographic Database maintained by U.S.G.S. and used by EPA. ftp://ftp.epa.gov/wed/ecoregions/ak/ak eco.pdf

From: Tabor, Brock N (DEC)

Sent: Tuesday, February 23, 2016 3:02 PM

To: 'lkduffy@alaska.edu' < !kduffy@alaska.edu; Fall, James A (DFG) < !jim.fall@alaska.gov; Gerlach, Robert F (DEC) < !bob.gerlach@alaska.gov; Jokela, Brett' < Brett.Jokela@awwu.biz; Jokela Brett' < Brett.Jokela@awwu.biz; Jokela Brett' < Brett.Jokela@awwu.biz; Jokela Brett' < Brett.Jokela@awwu.biz; Jokela@awwu.biz; Jokela@aw

'Kissinger, Lon' <Kissinger.Lon@epa.gov>; 'Alison Kelley' <Alison.Kelley@nana.com>; 'Michael Opheim'

<mopheim@svt.org>; Sonafrank, Nancy B (DEC) <nancy.sonafrank@alaska.gov>; 'Verbrugge, Lori'

<lori_verbrugge@fws.gov>; Wu, Ted H (DEC) <ted.wu@alaska.gov>; 'Kendra Zamzow' <kzamzow@csp2.org>; Hale,

Michelle M (DEC) <michelle.hale@alaska.gov>; 'Szelag, Matthew' <Szelag.Matthew@epa.gov>

 $\textbf{Cc:} \ Kostick, \ Marylynne \ L \ (DFG) < \underline{marylynne.kostick@alaska.gov} >; \ 'Tracie \ Merrill' < \underline{tmerrill@svt.org} >; \ Tabor, \ Brock \ N \\$

(DEC)

drock.tabor@alaska.gov>

Subject: FW: follow up to last Wedneday's teleconferece

My apologies all.

Jim had asked that I forward this information to the Workgroup. While the information is directly relevant to the discussion on development of regional rates, it is interesting to note how diverse Alaska is in its regulatory environment.

Brock Tabor brock.tabor@alaska.gov

Alaska Dept. of Environmental Conservation

Division of Water: Water Quality Standards, Assessment & Restoration

(907) 465-5185

http://www.dec.alaska.gov/water/wqsar/index.htm



From: Fall, James A (DFG)

Sent: Sunday, February 21, 2016 1:47 PM

To: Tabor, Brock N (DEC) < brock.tabor@alaska.gov>

Cc: Kostick, Marylynne L (DFG) < marylynne.kostick@alaska.gov >

Subject: follow up to last Wedneday's teleconferece

Brock: sorry it has taken a while to respond to the info requests from last Wednesday's teleconference, and I will be out of the office at another meeting tomorrow. Attached are two maps. One shows the census area boundaries and boundaries of the nonsubsistence areas, that I used to develop harvest estimates (this is from the forthcoming article in Arctic). The second is a map that shows the fisheries areas that are used in subsistence fishing regulations. I could not find a separate map of game management units (not as important for our purposes anyway) but here is a link to hunting regulations and a map appears on page 2:

http://www.adfg.alaska.gov/static/applications/web/nocache/regulations/wildliferegulations/pdfs/regulations complet e.pdf000C789210F8B674EBC0B38917791C11/regulations complete.pdf

There was also interest in the boundaries of Alaska Native groups. The best map is the one the Alaska Native Language Center produced. It can be downloaded from the ANLC website at http://www.uaf.edu/anla/collections/map/

I have note in my notes from Wednesday concerning the 1987 article by Wolfe and Walker on Subsistence economies in Alaska: productivity, geography, and development impacts." I think the interest was in how they addressed cultural areas. I only have a scan of this article and the file is very large. Table 4 in the article reports the following for "resource harvest by ecological zone (pounds per capita)":

Arctic-Subarctic Coast (Inupiaq-Yup'ik): fish = 363 lb per person; total = 610 lb per person

Aleutian-Pacific Coat (Aleut-Sugpiag): fish = 251 lb; total = 378 lb

Subarctic Interior (Athabaskan): fish = 256 lb; total = 377 lb

Northwest Coast (Tlingit-Haida): fish = 122 lb; total = 212 lb

[note that the estimates are based on a sample of communities from each area and include harvests by Natives and non-Natives]

If there is interest in more details from the Wolfe and Walker article, perhaps we can figure out how to provide it to work group members.

Please forward this to work group members. Thanks. [and let me know if I forgot anything)